U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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ZINC IN JUNE 1997

Domestic production in June, expressed in zinc content of concentrate, was about 10% below the previous month's production, and that of June 1996. The smelter production was about 5% lower than in May but was nearly 4% higher than a year ago. Apparent consumption in June increased by more than 15% compared with consumption in May and was about 18% above that of June 1996.

The Platt's Metals Week composite price for North American Special High Grade zinc increased by 1.8%.

Montreal-based Cambior Inc. has decided to restart production at its Gonzague-Langlois (formerly Grevet) underground zinc-copper-silver mine near Lebel-sur-Quévillon, in northwestern Quebec. The operation was suspended in December 1996, owing to high dilution problems encountered on the lower mining horizon, coupled with lower zinc prices. The decision to restart production in July comes in the wake of declining stocks and higher zinc prices. Production for 1997 is forecast to reach 15,300 tons of zinc in concentrate. At that rate of production, mine life is expected to be at least 12 years (Platt's Metals Week, 1997a).

Peru's Cajamarquilla refinery is expected to produce 100,000 tons of zinc in 1997, 5.1% less than last year. The fall in output will be due to necessary stoppages for expansion works at the plant that should ultimately double the refinery's output by 1999. The first expansion phase, a 20% capacity increase, will cost an estimated \$30 million. The second phase, which is in the planning stage, involves the construction of a parallel 110,000-ton-per-year refinery. Privatized in 1994, Cajamarquilla is owned by Cominco of Canada (82%), Marubeni Corp. of Japan (17%), and by employees (1%) (Platt's Metals Week, 1997b).

After two unsuccessful privatization attempts last year,

Centromin will try to sell the Yauricocha polymetallic mine in August 1997. The Peruvian mine has proven and probable reserves of 2.8 million tons and a resource of 6 million tons. The asking price will probably be below last year's \$8.5 million (Mining Journal, 1997).

The transfer of ownership of Peru's La Oroya metallurgical complex to Mexico's Industrias Penoles will take place on July 11, 1997. Penoles will pay \$226.5 million for a controlling 60% interest, while the original owner, Centromin, will retain the remaining 40% interest. La Oroya has an annual capacity of 91,000 tons of lead, 70,000 tons of zinc, 66,500 tons of copper, 809 tons of silver, and 2.3 tons of gold (Metal Bulletin, 1997a).

Australian miner Western Metals Ltd. has acquired the remaining 40.1% stake in the Blendevale lead-zinc deposit in the Kimberly region of Western Australia from its former joint venture partner Acacia Resources Ltd. for \$20 million. Western Metals currently produces 65,000 tons of zinc and 25,000 tons of lead from the nearby Cadjebut Mine. Production from the newly acquired Blendevale project should commence in mid-1998 (Metal Bulletin, 1997b).

References Cited

Metal Bulletin, 1997a, La Oroya deal completed: Metal Bulletin, no. 8191, June 30, p. 12.

———1997b, Western Metals acquires Blendevale from Acacia Resources: Metal Bulletin, no. 8183, June 2, p. 6.

Mining Journal, 1997, Yauricocha auction: Mining Journal, v. 328, no. 8432, June 6, p. 446.

Platt's Metals Week, 1997a, Cambrior to restart zinc mine: Platt's Metals Week, v. 68, no. 24, June 16, p. 9.

———1997b, Expansion work to cut Cajamarquilla zinc output: Platt's Metals Week, v. 68, no. 23, June 9, p. 2.

TABLE 1 SALIENT ZINC STATISTICS 1/

(Metric tons)

		1996			1997			
	June	JanJune	JanDec. p/	April	May	June	JanJune	
Production:								
Mine, zinc content of concentrate	52,300	311,000	603,000	50,200	52,000	46,900	294,000	
Mine, recoverable zinc	49,900	297,000	575,000	47,900	49,700	44,800	280,000	
Smelter, refined zinc	30,400	182,000 r/	366,000	31,900	33,300 r/	31,600	190,000	
Oxide (gross weight)	12,600 r/	79,500 r/	156,000	13,600 r/	14,100 r/	14,500	80,800	
Consumption:								
Refined zinc, reported	55,900 r/	339,000 r/	661,000	50,100 r/	48,100	45,800	280,000	
Ores e/ (zinc content)	150 r/	600 r/	1,800	150	150	150	900	
Zinc-base scrap e/ (zinc content)	8,300 r/	33,200 r/	100,000	8,300	8,300	8,300	49,800	
Copper-base scrap e/ (zinc content)	14,000 r/	56,000 r/	170,000	14,000	14,000	14,000	84,000	
Aluminum- and magnesium-base scrap e/								
(zinc content)	67 r/	268 r/	800	67	67	67	402	
Total e/	78,400 r/	429,000 r/	933,000	72,600 r/	70,600	68,300	415,000	
Apparent consumption, metal 2/	92,400 r/	581,000 r/	1,210,000	151,000	94,500 r/	109,000	674,000	
Stocks of refined (slab) zinc, end of period:								
Producer 3/	8,130 r/	XX	XX	12,100 r/	12,100	10,500	XX	
Consumer 4/	60,200 r/	XX	XX	54,400	55,300 r/	56,300	XX	
Merchant	1,980	XX	XX	5,260	5,110	5,220	XX	
Total	70,300 r/	XX	XX	71,800 r/	72,500 r/	72,100	XX	
Shipments of zinc metal from Government								
stockpile	1,430	3,900	16,500	13,400	7,600	1,850	35,300	
Imports for consumption:	1,150	3,700	10,500	15,100	7,000	1,050	33,300	
Refined (slab) zinc	57,200	388,000	827,000	104,000	54,400	NA	376,000 5	
Oxide (gross weight)	4,310	29,300	56,300	5,060	6,050	NA	27,200 5	
Ore and concentrate (zinc content)	522	1,500	15,100	12,500	2,940	NA	18,100 5	
Exports:								
Refined (slab) zinc	378	918	1,970	343	115	NA	1,230 5	
Oxide (gross weight)	348	3,160	5,770	321	346	NA	2,080 5	
Ore and concentrate (zinc content)	3,920	26,400	425,000	17,300	1,850	NA	42,800 5	
Waste and scrap (gross weight)	4,250	26,900	45,500	4,360	5,320	NA	21,800 5	
Price:	•		•	•	•		•	
London Metal Exchange, average,								
per metric ton	\$1,008.85	\$1,112.01	\$1,025.03	\$1,240.40	\$1,310.51	\$1,354.18	\$1,237.63	
Platt's Metals Week North American	,	*		*	*	,		
Special High Grade, average, ¢ per pound	49.57	50.44	51.11	61.97	64.94	66.12	61.69	

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

^{1/} Data are rounded to three significant digits, except prices; may not add to totals shown.

 $^{2/\,}Smelter\,production\,plus\,imports\,minus\,exports\,plus\,shipments\,from\,Government\,stockpile\,plus\,stock\,change.$

^{3/} Data from U.S. Geological Survey and American Bureau of Metal Statistics.

^{4/} Includes an estimate for companies that report annually.

^{5/} Includes data through May only.

${\bf TABLE~2}$ REFINED ZINC PRODUCED IN THE UNITED STATES 1/

(Metric tons)

	Beginning			Ending
Month	stocks 2/	Production	Shipments	stocks 2/
1996: p/				
JanJune	XX	182,000	181,000 r/	XX
June	8,040	30,400	30,300	8,180 r/
July	8,180 r/	30,800	30,400 r/	8,650 r/
August	8,650 r/	27,400	27,500 r/	8,570 r/
September	8,570 r/	30,800	29,900 r/	9,480 r/
October	9,480 r/	32,300	31,600 r/	10,100
November	10,100	32,000	30,300 r/	11,800 r/
December	11,800 r/	31,200	32,300 r/	10,800 r/
Total	XX	366,000	363,000 r/	XX
1997:				
January	10,800 r/	32,700	32,200 r/	11,300
February	11,300	29,300	29,800 r/	10,800
March	10,800	31,300	30,400 r/	11,600
April	11,600	31,900	31,400 r/	12,100 r/
May	12,100 r/	33,300 r/	33,300 r/	12,100
June	12,100	31,600	33,200	10,500
JanJune	XX	190,000	190,000	XX
/D 1: : /D	1 1 3737 37 .	11 11		•

p/ Preliminary. r/ Revised. XX Not applicable.

Sources: U.S. Geological Survey and American Bureau of Metal Statistics.

 $\begin{tabular}{ll} TABLE 3 \\ ZINC OXIDE PRODUCED 1/IN THE UNITED STATES 2/ \\ \end{tabular}$

(Metric tons, gross weight)

	Beginning			Ending
Month	stocks	Production	Shipments	stocks
1996: p/				
JanJune r/	XX	79,500	82,700	XX
June	3,330	12,600	12,200	3,740
July	3,740	11,500	12,000	3,280
August	3,280	12,300	12,600	3,000
September	3,000	12,500	12,200	3,260
October	3,260	13,500	13,500	3,200
November	3,200	13,500	13,500	3,180
December	3,180	13,800	13,500	3,480
Total	XX	156,000	160,000	XX
1997:				
January	3,480	13,000	13,300	3,190
February	3,190	12,200	12,000	3,380
March	3,380	13,400	12,700	4,120
April	4,120	13,600 r/	13,600 r/	4,040 r/
May r/	4,040	14,100	14,200	3,920
June	3,920	14,500	13,800	4,700
JanJune	XX	80,800	79,600	XX

p/ Preliminary. r/ Revised. XX Not applicable.

 $^{1/\,\}textsc{Data}$ are rounded to three significant digits; may not add to totals shown.

^{2/} Includes stocks held at locations other than smelters.

^{1/} Excludes impure zinc oxide produced from other processes.

^{2/} Data are rounded to three significant digits; may not add to totals shown.

${\it TABLE~4}\\ {\it ESTIMATED~DISTRIBUTION~1/~OF~ZINC~OXIDE~SHIPMENTS~BY~INDUSTRY~2/~3/}}$

(Metric tons, gross weight)

Industry		1996	1997				
	June r/	JanJune r/	JanDec. p/	April	May	June	JanJune
Agriculture	W	W	W	W	W	W	W
Ceramics	564	3,320	6,180	430 r/	504 r/	529	2,730
Chemicals	2,380	16,900	32,700	2,860 r/	3,230 r/	2,910	16,900
Paints	565	3,660	6,790	641 r/	599	652	3,470
Photocopying	W	W	W	W	W	W	W
Rubber	8,270	55,400	108,000	9,140 r/	9,320 r/	9,100	53,300
Other	449	3,400	6,260	565	562 r/	561	3,170
Total	12,200	82,700	160,000	13,600 r/	14,200 r/	13,800	79,600

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

 ${\tt TABLE~5}$ APPARENT CONSUMPTION OF REFINED ZINC ACCORDING TO INDUSTRY USE AND PRODUCT 1/

(Metric tons)

		1996			1997		
Industry and product	June r/	JanJune r/	JanDec. p/	April	May r/	June	JanJune
Galvanizing:							
Sheet and strip	37,200	235,000	494,000	62,800 r/	37,400	43,200	279,000
Other	11,600	73,400	160,000	23,400 r/	12,400	15,500	97,300
Total	48,700	308,000	654,000	86,300 r/	49,800	58,600	377,000
Brass and bronze	11,600	73,600	155,000	20,900	12,200	14,600	91,400
Zinc-base alloy	16,200	103,000	229,000	27,700 r/	17,600	19,800	121,000
Other uses 2/	15,800	96,300	172,000	16,100 r/	14,900	15,500	85,500
Total	92,400	581,000	1,210,000	151,000	94,500	109,000	674,000

p/ Preliminary. r/ Revised.

TABLE 6 AVERAGE MONTHLY ZINC PRICES

	North American		
	Special High Grade,	LME	cash
Month	¢/lb	¢/lb	\$/mt
1996:			
June	49.57	45.75	1,008.85
July	49.87	45.36	1,000.39
August	51.26	45.67	1,007.24
September	51.39	45.37	1,000.64
October	51.52	45.50	1,003.46
November	53.31	47.47	1,046.83
December	52.77	47.00	1,036.26
Year average	51.11	46.50	1,025.03
1997:			
January	55.17	49.28	1,086.52
February	59.26	53.50	1,179.38
March	62.69	56.92	1,254.80
April	61.97	56.26	1,240.40
May	64.94	59.44	1,310.51
June	66.12	61.42	1,354.18

Source: Platt's Metals Week.

 $^{1/\,}Distribution\ of\ U.S.\ producers\ only.\ Imports\ excluded\ because\ distribution\ by\ industry\ cannot\ be\ distinguished.$

^{2/} May include in-house consumption.

^{3/} Data are rounded to three significant digits; may not add to totals shown.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes zinc used in making zinc dust, wet batteries, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, zinc oxide, rolled zinc, and miscellaneous uses not elsewhere specified.

TABLE 7 U.S. EXPORTS OF ZINC 1/

			1997				
	199	1996		May		late 2/	
	Quantity	Quantity Value		Value	Quantity	Value	
Material	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Refined (slab) zinc	1,970	\$2,350	115	\$157	1,230	\$1,590	
Ore and concentrate (zinc content)	425,000	190,000	1,850	1,350	42,800	16,600	
Waste and scrap (gross weight)	45,500	30,300	5,320	3,610	21,800	14,800	
Powders, flakes, and dust (zinc content)	11,100	21,400	852	1,450	3,760	7,130	
Oxide (gross weight)	5,770	9,430	346	534	2,080	4,130	
Chloride (gross weight)	1,470	1,230	147	103	1,340	896	
Sulfate (gross weight)	5,230	2,970	1,400	700	2,750	1,530	
Compounds, other (gross weight)	1,250	4,670	19	34	118	420	

^{1/} Data are rounded to three significant digits.

Source: Bureau of the Census.

TABLE 8 U.S. IMPORTS FOR CONSUMPTION OF ZINC 1/

			1997				
	199	6	M	May		date 2/	
	Quantity	Quantity Value		Value	Quantity	Value	
Material	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Refined (slab) zinc	827,000	\$882,000	54,400	\$71,100	376,000	\$442,000	
Ore and concentrate (zinc content)	15,100	6,380	2,940	1,990	18,100	8,680	
Waste and scrap (gross weight)	31,900	12,800	1,990	816	12,300	5,030	
Powders, flakes, and dust (zinc content)	10,300	17,600	707	1,330	3,890	7,270	
Oxide (gross weight)	56,300	57,500	6,050	6,170	27,200	29,300	
Chloride (gross weight)	2,420	2,140	234	206	1,050	647	
Sulfate (gross weight)	4,050	2,840	425	209	2,420	1,390	
Compounds, other (gross weight)	1,190	1,280	201	183	610	700	

^{1/} Data are rounded to three significant digits.

Source: Bureau of the Census.

TABLE 9 SHIPMENTS OF ZINC METAL FROM THE NATIONAL DEFENSE STOCKPILE 1/

(Metric tons)

	Beginning		Ending
Month	inventory	Shipments	inventory
1996:		,	
June	271,000	1,430	270,000
July	270,000	1,870	268,000
August	268,000	1,460	266,000
September	266,000	2,550	264,000
October	264,000	1,630	262,000
November	262,000	2,810	259,000
December	259,000	2,110	257,000
Total	XX	16,500	XX
1997:			
January	257,000	3,020	254,000
February	254,000	4,400	250,000
March	250,000	5,080	245,000
April	245,000	13,400	231,000
May	231,000	7,600	224,000
June	224,000	1,850	222,000
Year to date	XX	35,300	XX

XX Not applicable.

Source: Defense Logistics Agency.

^{2/} Data for the current month were not available at time of publication.

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^{1/} Data are rounded to three significant digits; may not add to totals shown.

TABLE 10 U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY 1/

(Metric tons)

	Ge	eneral impor	ts	Imports for consumption		
		19	97 2/		19	97 2/
Material and country	1996	May	Year to date	1996	May	Year to date
Ore and concentrate (zinc content):	_					
Australia			9,930			9,930
Mexico	7,000	14	5,300	6,970	14	5,300
Peru	10,000	2,920	3,190	8,080	2,920	2,920
Other	322		150	91		
Total	17,300	2,940	18,600	15,100	2,940	18,100
Blocks, pigs, or slab:						
Brazil	32,000	1,000	10,400	32,000	1,000	10,400
Canada	503,000	37,000	201,000	503,000	37,000	201,000
Finland	18,300		11,000	18,300		11,000
Mexico	93,900	5,360	25,800	93,900	5,360	25,800
Peru	23,800	1,400	7,250	23,800	1,400	7,250
Russia	24,100	2,200	9,840	24,100	2,200	9,840
Spain	83,200	2,000	57,100	91,400	2,000	67,300
Sweden			12,500			
Other	40,500	5,460	42,800	40,900	5,460	42,800
Total	819,000	54,400	378,000	827,000	54,400	376,000
Dross, ashes, & fume (content)	15,800	1,110	6,430	15,800	1,110	6,430
Grand total	852,000	58,500	403,000	858,000	58,500	400,000
Oxide (gross weight):						
Canada	28,600	2,690	13,800	28,600	2,690	13,800
China	2,070	1,290	1,800	2,070	1,290	1,800
Mexico	21,400	1,860	9,210	21,400	1,860	9,210
Other	4,420	237	2,420	4,310	225	2,380
Total	56,400	6,070	27,300	56,300	6,050	27,200
Other (gross weight):						
Waste and scrap	31,900	1,990	12,300	31,900	1,990	12,300
Sheets	16,900	2,940	11,500	16,900	2,940	11,500
Dust, powder, flakes	10,300	707	3,890	10,300	707	3,890

^{1/} Data are rounded to three significant digits; may not add to totals shown. 2/ Data for the current month were not available at time of publication.

Source: Bureau of the Census.